(1) exchange access; (2) telephone exchange service offered exclusively through the resale of the BOC's telephone exchange service; and (3) cellular service.

Id. at 147 (latter emphasis added). Having established the requirement that competing carriers be provided access to unbundled network elements, Congress was well aware that competing carriers might use both facilities to which they have title and unbundled network elements over which they otherwise have control to provide local exchange service. If Congress had intended that such provision of local exchange service would not constitute service over the competing carrier's own facilities, it would have drafted the statute to so indicate, or, at a minimum, added such service to the list of services that do not meet the "facilities-based" requirement.

The distinction drawn by Congress between resold service and facilities-based provision of local exchange service makes perfect sense. Resellers do not control the facilities that are used to provide services. By contrast, new facilities-based carriers — carriers that use facilities to which they have title in combination with unbundled network elements over which they have control — are able to create and offer new and different services or service packages, and thereby create competitive advantage. See Harris/Teece Aff., pp. 9-18.10/ See also In the

<u>10</u>/ For example, Professors Harris and Teece conclude that "control of switching capacity is the primary source of the competitive advantage in the network." Harris/Teece Aff., p. 17. They explain: "The switch not only manages the routing of calls through the network but also provides the end-user with value-added features and functions. . . . [I]t is the switch that sets up the call path. It is also the switch that provides SS7 features, such as call waiting and caller ID, and the new advanced intelligent network (AIN) features such as voice response, advanced conferencing services, and customized call distribution and message treatment. As a result, it is through the basic and value-added switching features that competitors will most likely strive to differentiate themselves." Id., p. 16. In this context, it is important to emphasize, as indicated above, that Brooks Fiber has switches in Grand Rapids, Lansing and Traverse City; MFS has a switch in Detroit; and TCG has a switch in Detroit. See id., p. 47. These providers also have fiber optic networks in Detroit, Grand Rapids, and other major Michigan cities. See id. The switching and network capabilities of Brooks Fiber, MFS, and TCG enable each of them, as an independent competitive force, to create new services and products and thereby to differentiate itself from its respective competitors.

Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, FCC 97-157, Report and Order, ¶ 160 (May 8, 1997) ("Universal Service Report and Order") ("The opportunity to purchase access to unbundled network elements . . . provides carriers with greater control over the physical elements of the network, thus giving them opportunities to create service offerings that differ from services offered by an incumbent").

It should come as no surprise, therefore, that the Commission recently interpreted the term "own facilities" to include both facilities to which a competing carrier has title and facilities that a competing carrier obtains from a BOC as unbundled network elements. <u>Universal Service Report and Order</u>, ¶ 164 ("the most reasonable interpretation of section 214(e)(1)(A) is that the phrase 'own facilities' includes the provision of service through unbundled network elements"). ¹¹/

In sum, Section 271(c)(1)(A) imposes three requirements regarding agreements with competing providers of telephone exchange services. First, the BOC must provide access and interconnection to the competing providers. Second, such providers must be operational and offer services to business and residential subscribers. Third, those services must be offered exclusively or predominantly over the facilities of such competing providers. Ameritech's agreements with Brooks Fiber, MFS and TCG satisfy each of these criteria.

While it was "not interpreting the language in Section 271," the Commission noted that the "'own facilities' language in section 214(e)(1)(A) is very similar to language in section 271(c)(1)(A), governing Bell Operating Company (BOC) entry into interLATA services," and that, "given the similarity of the language in theses two sections," it would be "particularly troubling to allow the states unfettered discretion in interpreting and applying the 'own facilities' language in section 214(e)." Universal Service Report and Order, ¶ 168.

IV. AMERITECH HAS FULLY IMPLEMENTED THE COMPETITIVE CHECKLIST.

Section 271(d)(3)(A) requires that, with respect to the access and interconnection provided under subsection (c)(1)(A), the BOC must have "fully implemented the competitive checklist in subsection (c)(2)(B)." Ameritech satisfies this requirement by providing each of the checklist items to its Section 271(c)(1)(A) competitors (Brooks Fiber, MFS and TCG) at rates and on terms and conditions that comply with the Act.

A. The Access and Interconnection that Ameritech is Providing to Brooks Fiber, TCG and MFS Satisfies the "Competitive Checklist" in Section 271(c)(2)(B).

The access and interconnection that Ameritech is providing to Brooks Fiber, MFS and TCG pursuant to the approved interconnection agreements between Ameritech and these carriers "meets the requirements of," and "fully implement[s]" the competitive checklist in, Section 271(c)(2)(B). See Sections 271(c)(2)(A)(ii) and 271(d)(3)(A)(i).

As described in detail in Section IV.B, Ameritech furnishes twelve of the fourteen checklist items to Brooks Fiber, 12/2 twelve of the fourteen checklist items to MFS 13/2 and ten of the fourteen checklist items to TCG. 14/2 Taken together, Ameritech furnishes thirteen of the fourteen checklist items to Brooks Fiber, MFS, and TCG. The single checklist item not currently being furnished to these carriers is unbundled local switching. Ameritech does not currently furnish unbundled local switching to its Section 271(c)(1)(A) competitors for one

Brooks Fiber obtains every checklist item except unbundled local switching and resale. See Edwards Aff., Sch. 2.

MFS obtains every checklist item except unbundled local switching and poles, ducts, conduits and rights-of-way, though it has orders for the latter being processed. See Edwards Aff., Sch. 2.

TCG obtains every checklist item except unbundled local switching; poles, ducts, conduits and rights-of-way (though it has orders being processed); interim number portability; and resale. See Edwards Aff., Sch. 2.

simple reason: none of them has placed an order for unbundled local switching, and none has committed to buy unbundled local switching by a date certain. However, Ameritech has fully satisfied its obligation to unbundle switching from transport, local loop transmission or other services, and Ameritech makes unbundled local switching available to each competitor. Once any of those competitors actually places an order for unbundled local switching, Ameritech stands ready to fill it. See Kocher Aff., ¶¶ 47-64.

In addition, Ameritech makes available to Brooks Fiber, MFS and TCG each of the checklist items at rates and on terms and conditions that comply with the Act. Ameritech has achieved, through arbitration, interconnection agreements with the Michigan operating affiliates of AT&T and Sprint ("AT&T Agreement" and "Sprint Agreement," respectively) that include each of the checklist items. In approving the AT&T and Sprint Agreements under Section 252(e)(2), the MPSC determined that the arbitrated rates, terms and conditions contained in those agreements comply with Sections 251 and 252(d) of the Act and this Commission's interconnection regulations. ¹⁵

Brooks Fiber, MFS and TCG may purchase any and all of the checklist items out of the AT&T and Sprint Agreements pursuant to the "most favored nation" ("MFN") clauses in their respective interconnection agreements. 16/ A carrier may assert its MFN rights by sending

Opinion and Order, Case Nos. U-11151/U-11152, pp. 5-6 (Mich. Pub. Serv. Comm'n) (April 4, 1997) ("The Commission finds that the agreement is consistent with federal and state law, and is in the public interest"); Opinion and Order, Case No. U-11203, pp. 3-4 (Mich. Pub. Serv. Comm'n) (April 4, 1997) (same). As discussed below certain of the rates in the Sprint Agreement were the product of private negotiations, not arbitration, and therefore technically were not covered by the MPSC's determination. As we demonstrate, however, these additional rates also comply with Section 252(d).

See Brooks Fiber Agreement, § 28.15; MFS Agreement, § 28.14; TCG Agreement, § 29.13. See also In the Matter of Application of SBC Communications Inc. et al. (continued...)

Ameritech a letter specifying the rates, terms and conditions relating to an interconnection arrangement, unbundled elements or combination, or resale service in another carrier's approved agreement that the requesting carrier is adding to its agreement. Edwards Aff., ¶¶ 14-15, Sch. 3. Ameritech will review MFN letters and promptly draft an amendment to the requesting carriers's agreement to implement the new rates, terms and conditions. Id., ¶ 16. The amendment becomes effective upon execution by the requesting carrier, though it will subsequently be filed with the MPSC and made available for public inspection under Section 252(h). Id., ¶¶ 16-17. Thus, Brooks Fiber, MFS and TCG have available to them all elements, products and services covered by the AT&T and Sprint Agreements at the rates and on the terms and conditions specified therein.

The provisions of the Brooks Fiber, MFS, TCG, AT&T and Sprint Agreements are not mere "paper promises." With respect to all but one of the checklist items, Ameritech has responded to specific orders from these (and other) carriers and furnishes the ordered items in the manner contemplated by the agreements and required by the Act. See Edwards Aff., Sch. 1 and Sch. 2. Ameritech also has put in place access to operations support systems ("OSS") functions, including electronic interfaces, procedures and methods, which ensure that Brooks Fiber, MFS and TCG enjoy access to information, elements, products, and services that is

 $[\]frac{16}{}$ (...continued)

Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in the State of Oklahoma, CC Docket No. 97-121, Evaluation of the United States Department of Justice at 22 (May 16, 1997) ("DOJ Evaluation"). (A BOC may satisfy the requirement that it provide access and interconnection that satisfies the competitive checklist pursuant to one or more agreements "through the use of 'most favored nation' clauses which readily allow provisions of other approved interconnection agreements to be imported into agreements with qualifying Track A competitors").

See also Ameritech Michigan's Submission in Response to TCG Detroit, Case No. U-11104, p. 3 (Mich. Pub. Serv. Comm'n dated May 14, 1997).

equivalent to that which Ameritech provides to itself, its affiliates, and other carriers. Mickens Aff., ¶ 71-73.

1. Ameritech Satisfies its Checklist Obligations by Furnishing or Making Available Each Checklist Item to Competing Carriers.

There can be no doubt that Ameritech has satisfied its obligation to "provide" each of the checklist items to its competitors pursuant to Sections 271(c)(1)(A) and 271(c)(2)(B). It would be senseless to conclude that a BOC "provides" all of the checklist items only if it actually furnishes each of them to competing carriers. The reason is plain: As Ameritech's experience in Michigan has shown, it is entirely possible that, even if a BOC satisfies its obligations under Sections 251 and 252 and the Commission's regulations, there may be certain checklist items that no carrier will choose to buy. Under such circumstances, if the term "provide" were misinterpreted to mean "actually furnish," and if, through no fault of the BOC, no Section 271(c)(1)(A) competitor elects to purchase a checklist item, the BOC could be indefinitely barred from obtaining Section 271(c)(1)(A) relief.

Congress obviously did not intend such a result. Prohibiting a BOC from entering the long distance business simply because no competitor elects to take one or more items from the competitive checklist would defy common sense and clash with the design of the Act as a whole. The competitive checklist was Congress' ex ante prediction about which items relating to access and interconnection might be necessary to facilitate competition in the local exchange market. But the primary tool for opening the local market to competition was to be negotiated (and, if necessary, arbitrated) agreements between the BOCs and potential competitors. If no Section 271(c)(1)(A) competitors actually order a checklist item, they must have concluded that they do not need the item to compete successfully in the local market. Put differently, those

competitors must have concluded that they can compete effectively without taking the checklist item in question. After all, Ameritech's interconnection agreements do not obligate competing carriers to purchase any checklist item, let alone all of them. Interpreting the term "provide" to mean exclusively "actually furnish" would have the perverse consequence of making Ameritech's competitors the gatekeepers of its entry into long distance.

The only sensible interpretation, then, is that a BOC "provides" a given checklist item to competitors either by actually furnishing the item to carriers that have ordered it or by making available that item, through an approved interconnection agreement, to carriers that may elect to order it in the future. See DOJ Evaluation at 23 ("A BOC is providing an item, for purposes of checklist compliance, if the item is available both as a legal and practical matter, whether or not any competitors have chosen to use it"). This interpretation, in fact, comports fully with the language of the Act. The verb "provide" means to "make available" or to "furnish."

Random House Unabridged Dictionary 1556 (2d ed. 1993); see also Merriam Webster's Collegiate Dictionary 940 (10th ed. 1993) ("supply or make available"). The Act's use of the language "provided . . . by" a BOC, therefore, means that the BOC must either "furnish" the checklist item or make it "available." It does not require that the other contracting party actually put it to use. Therefore, a BOC satisfies Section 271(c)(2)(B)'s requirement that it "provide" the checklist items when its agreements with qualifying carriers make those items

Although not all dictionaries use the precise term "make available," they consistently define "provide" as relating to an ability to perform when needed. <u>E.g.</u>, <u>The Oxford English Dictionary</u>, vol. xii, 713 (2d ed. 1989) ("to make provision or adequate preparation").

available, on terms and conditions that comply with the Act, upon order by the carriers, not when those carriers actually decide to take them. 19/

The Act's legislative history confirms that there is no requirement in Section 271(c)(2)(B) that competing providers order and take all 14 checklist items, so long as the BOC makes such items available to be furnished on rates, terms and conditions that comply with the Act. See H.R. Rep. No. 104-458, 104th Cong., 2d Sess. 144 (1996) ("checklist" is the "minimum" requirement imposed on a BOC "assuming the other party or parties to that agreement have requested the items included in the checklist") (emphasis added). Thus, Congress recognized that a competing carrier — or all carriers taken together — might not need, and therefore might not actually order, all of the items on the checklist. Under these circumstances, Congress plainly did not intend to require that all items actually be ordered and furnished for the BOC to comply with Section 271(c)(2)(B).

In sum, and as described in detail in Section IV.B, Ameritech has fully implemented the competitive checklist because it actually furnishes those checklist items that its

<u>19</u>/ This construction of the term "provide" accords with those rendered by courts in analogous contexts. In Usery v. Kennecott Copper Corp., 577 F.2d 1113 (10th Cir. 1977), for example, the court was called upon to interpret an OSHA regulation requiring that "[a]n access ladder or equivalent safe access shall be provided" (emphasis added) whenever workers are on scaffolds. The Secretary of Labor charged an employer with violating the regulation, alleging that the employer had simply made "ladders . . . available to [its] employees" without "requiring that they use them." Id. at 1118 (emphasis added). The Tenth Circuit disagreed. It explicitly rejected the Secretary's construction of "'shall be provided' to mean 'shall require use,'" noting that such a construction rested upon an "unusual meaning" of the term "provide." Id. at 1118-19. Citing the dictionary definition of "provide," the court concluded that an employer complies with the regulation if it makes an access ladder available for its employees' use, regardless of whether the employees actually use the ladder. Id. Accord, e.g., Thurston v. Department of Employment Security, 498 N.E.2d 864 (Ill. App. 1986) (interpreting statutory term "provide" to mean supply or make available). There is no good reason to accord the term "provide" in Sections 271(c)(1)(A) and 271(c)(2)(B) a different meaning.

Section 271(c)(1)(A) competitors have ordered, and makes available <u>all</u> checklist items — including unbundled local switching, the only checklist item that has not been ordered — at rates and on terms and conditions that comply with the Act.

2. Ameritech's Operations Support Systems, Performance Benchmarks and Prices Ensure That All Checklist Items Are Provided in a Nondiscriminatory Manner.

Before addressing the specific checklist items, Ameritech will describe how it ensures that all checklist items, including interconnection, unbundled network elements ("UNEs") and resale services, are provided to all requesting carriers on a nondiscriminatory basis in compliance with the Act. <u>First</u>, Ameritech has developed, tested, and implemented access to its OSS functions and other support processes which are used in providing checklist items. <u>Second</u>, Ameritech has agreed to performance measures to track the quality, intervals and reliability of checklist items. <u>Third</u>, all competing carriers, including Brooks Fiber, MFS and TCG, have available to them all checklist items at prices that comply with the Act. The methods, procedures and operational aspects of making <u>all</u> checklist items available to competing carriers are described in detail in the affidavits of Messrs. Mayer (<u>passim</u>), Kocher (<u>passim</u>), Mickens (¶¶ 70-115), Rogers (<u>passim</u>), Meixner (¶¶ 5-55), and of Ms. Foerster (¶¶ 5-12).

Operations Support Systems Functions. OSS functions are the "back office" databases and information used to support the provision of service to end users. Ameritech's OSS functions serve five different business activities:

(1) pre-ordering, <u>i.e.</u>, the ability of service representatives to obtain information such as available features, telephone numbers, and service due dates for customers during the initial customer contact, as well as other information necessary for submitting an accurate service order;

- (2) ordering, i.e., the ability to place the service order;
- (3) provisioning, <u>i.e.</u>, the ability to track the completion of the service order;
- (4) repair and maintenance, <u>i.e.</u>, the ability to submit trouble reports and track their resolution; and
- (5) billing, <u>i.e.</u>, providing usage data and monthly service summaries to competing providers to enable them to bill their end users.

Ameritech has opened interfaces or gateways to these OSS functions and made them available to Brooks Fiber, MFS, TCG, AT&T and Sprint (and all other competing carriers). In so doing, Ameritech has provided those carriers with equivalent access to information, elements, products and services that Ameritech provides to itself, its affiliates, and other carriers in each of the functional areas identified above. Mickens Aff., ¶¶ 71-73. Access to OSS functions is described in detail in the affidavits of Messrs. Mickens, Rogers, Meixner and Ms. Foerster.

See AT&T Agreement, §§ 10.13.2, 10.13.3, 10.16, Sch. 9.2.6, Sch. 9.5, § 7.0, Sch. 10.13 and Sch. 10.13.2; Sprint Agreement, §§ 10.13.2, 10.13.3, 10.16, Sch. 9.2.6, Sch. 9.5, § 7.0, Sch. 10.13 and Sch. 10.13.2. See also Ameritech Michigan's Submission of Information in Response to Brooks Fiber, Case No. U-11104, pp. 10-15 (Mich. Pub. Serv. Comm'n dated May 9, 1997); Ameritech Michigan's Submission of Additional Information Regarding Operations Support Systems, Case No. U-11104 (Mich. Pub. Serv. Comm'n dated April 7, 1997).

Ameritech provides access to OSS functions through the following electronic interfaces:

OSS Function	Interface	User Specifications Publication Date	Carrier Tested/Actual Use
Pre-Ordering			
Access to customer records ("CSRs")	EDI	10/96	Yes
Telephone Number Selection	EDI	10/96	Yes
Due Date Selection	EDI	10/96	Yes
Feature Availability	File Transfer	10/96	Yes
Address Validation	File Transfer	10/96	Yes
Ordering/Provisioning			
For resale			1
Order Entry	EDI	11/95	Yes
Firm Order Confirmation ("FOC")	EDI	11/95	Yes
Order Status	EDI	11/95	Yes
Order Completion	EDI	11/95	Yes
For unbundled network elements ²¹		ŀ	
Order Entry	ASR	2/95	Yes
FOC	ASR	2/95	Yes
Maintenance and Repair			
Trouble Entry	T1M1	2/96	Yes
Trouble Status	T1M1	2/96	Yes
Billing			
For resale	1		
Daily Usage	EMR	2/96	Yes
Monthly Billing Data	AEBS	2/96	Yes
For unbunbled network elements ²²	CABS	2/96	Yes

Ameritech's interfaces comply with existing industry standards and guidelines.²³ Foerster Aff., ¶¶ 8-12; Rogers Aff., ¶¶ 9-10, 124 & Sch. 2.

Unbundled local switching, line side, is ordered and provisioned via EDI. Unbundled transport and trunk side switching elements are ordered and provisioned via ASR.

Unbundled local switching, line side, is billed via AEBS. Unbundled transport and trunk side switching elements are billed via CABS.

^{23/} See AT&T Agreement, §§ 10.13.2, 10.13.3; Sprint Agreement, §§ 10.13.2, 10.13.3.

Under any reasonable definition, Ameritech has provided — and has put in place procedures and systems that ensure that it will continue to provide — nondiscriminatory access to its OSS functions. First, Ameritech has made available the technical and business information that carriers can use to access Ameritech's interfaces. Moreover, all of these interfaces are operationally ready to process data, and many of them are already doing so on a commercial basis. And, finally, Ameritech has built sufficient electronic and manual capacity to meet expected future usage volumes.

Ameritech plainly satisfies the requirement, as stated in the Commission's December 13, 1996 Second Order on Reconsideration, that incumbent carriers make their interface design specifications known to requesting carriers. Ameritech has provided requesting carriers with detailed specifications that contain the technical information that other carriers need in order to "build to" Ameritech's interfaces, and ordering guides that contain business information that the carriers can use in ordering specific products and services. These materials include Ameritech's Electronic Service Ordering ("ESO") Guide, which provides the technical specifications for Ameritech's EDI and File Transfer interfaces; Ameritech's Unbundled Services Ordering Guide, which addresses the specific network elements defined by the Commission and identified in the Section 271 checklist; and Ameritech's Resale Services Ordering Guide, which covers the retail services that Ameritech provides to residential and small business users and that are available for resale. In preparing and revising its specifications and ordering guides, Ameritech consulted outside experts who provided guidance in the form of detailed criteria and who, after careful review, concluded that these materials are usable and comply with industry standards. Foerster Aff., ¶ 8-12; Meixner Aff., ¶ 8-12. See also Rogers Aff., ¶ 9, 12 & Sch. 2. Ameritech also has implemented procedures to communicate future updates to this OSS documentation in an appropriate and timely manner. Meixner Aff., ¶ 14. Ameritech's technical specifications, ordering guides and other OSS-related documentation (approximately 4,500 pages of material) are available on Ameritech's Internet web site for those carriers that have signed a confidentiality agreement. Id. ¶¶ 8, 14; Rogers Aff., ¶ 12.

In addition, Ameritech provides requesting carriers with one-on-one training sessions and conducts regular follow-up meetings to assure that those carriers understand how Ameritech's OSS interfaces and processes operate. Rogers Aff., ¶¶ 5, 14, 38, 124. Ameritech invests significant time working with personnel of requesting carriers, in order to address specific questions that arise in connection with their access to Ameritech's OSS functions. Ameritech has hired service managers who are specifically assigned to assist requesting carriers with operational and service issues. As part of their duties and activities, these service managers conduct monthly service meetings with requesting carriers to address and resolve operational questions, interface issues, and performance concerns. Mickens Aff., ¶¶ 12-16.

The electronic interfaces that provide access to Ameritech's OSS functions work properly. This is amply demonstrated by the results of internal testing, carrier-to-carrier testing and/or actual use of the interfaces to date. All of the interfaces have passed comprehensive internal tests. Meixner Aff., ¶¶ 15-17 & Sch. 3; Rogers Aff., ¶¶ 6, 19, 25, 33-35, 82 & Schedules 1, 3. Many of the interface functions have also been subjected to successful carrier-to-carrier testing, and a significant number of them are in actual use. Meixner Aff., ¶¶ 15-17 & Sch. 3; Rogers Aff., ¶¶ 6, 25-29, 36-37, 82-85, 90-98, 102, 124 & Schedules 8, 15. Since the beginning of the year, the number of carriers using the interfaces and the volume of transactions over the interfaces have increased substantially. Rogers Aff., ¶¶ 25, 36-37, 70, 82-83, 92, 98, 102 & Sch. 8. Outside systems experts have reviewed the information on testing

and actual use and have concluded that Ameritech's interfaces are operationally ready. Meixner Aff., ¶ 15.

In a number of recent state regulatory proceedings, including proceedings in Michigan, Wisconsin and Illinois, AT&T and several other carriers have identified certain problems that they have encountered in connection with their use of Ameritech's OSS interfaces. Notwithstanding their continued and steadily increasing use of those interfaces, these carriers have asserted that the alleged problems they have encountered establish that Ameritech's OSS interfaces are not yet operationally ready.²⁴ These carriers' complaints miss the mark in at

<u>24</u>/ Based in substantial part on these carrier complaints, the Public Service Commission of Wisconsin ("PSCW") on April 3, 1997, in a proceeding involving Ameritech Wisconsin's Statement of Generally Available Terms, concluded that Ameritech Wisconsin had not yet met its burden of demonstrating, to the PSCW's satisfaction, that Ameritech's OSS interfaces are operationally ready. (PSCW Open Meeting, Utility Regulation Report, at 5 (April 3, 1997).) Ameritech respectfully submits that the PSCW's conclusion was erroneous. At the same time, however, we recognize that the PSCW was confronted with an incomplete record — due in part to the fact that AT&T and other carriers had only recently identified the alleged problems, and that, as a result, Ameritech had not yet had the time to thoroughly investigate and respond to these carriers' claims. described in detail in the Rogers affidavit, to the extent it had not done so by the time of the hearing before the PSCW (March 31, 1997), Ameritech has since addressed and resolved all of the alleged problems identified for the PSCW. Rogers Aff., ¶ 18, 45, 51, 80, 99-101, 105 & Schedules 13-14. The hearing examiner in the Illinois Commerce Commission's Investigation concerning Illinois Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996, Docket No. 96-0404, also concluded, even earlier (March 6, 1997), that Ameritech had not satisfied its burden of demonstrating, "with empirical evidence" including "actual testing with other carriers," that its OSS are "operational and functional." (hearing examiner's proposed order, at 28). Again, although we believe this conclusion was incorrect, it bears noting that the record on which the hearing examiner based his conclusion for the most part was closed in late December 1996, before substantial actual use and carrier-to-carrier testing had occurred. Since that time, most major functions have been subjected to successful carrier-to-carrier testing, actual commercial use has increased at an exponential rate, and rigorous capacity testing has been conducted — and confirms that each of the OSS interfaces is capable of handling forecasted demand through the end of this year. Rogers Aff., ¶¶ 25, 36-37, 70, 82-83, 92, 98, 102, 109-114, 124 & Schedules 8, 16. Neither of these tentative conclusions — the PSCW's of April 3, 1997 or the Illinois hearing (continued...)

least two fundamental respects.

First, the complaints of AT&T and other carriers suggest that they seek to hold Ameritech's OSS interfaces to an impossibly high "bug-free" standard that no information technologies system or application could ever meet. Most of the problems that AT&T and the other carriers have identified are typical problems that users of information technologies systems and applications throughout the world encounter on an ongoing basis. No information technologies system or application — whether designed for and used by the telecommunications industry, state or federal governments, the personal computer industry or some other manufacturing or service sector of the economy — is completely devoid of troubles or "bugs."

See Meixner Aff., ¶ 16 (citing Microsoft Windows 95 as illustration). This is especially true when two or more companies must interconnect separate, complex "back-end" systems through interfaces. In such circumstances, it is virtually inevitable — indeed, it is expected — that syntactical errors, process issues, and other related problems will arise on an ongoing basis. These types of problems, however, do not affect operational readiness. 25/

Second, neither AT&T nor other complaining carriers address or acknowledge, as part of their litigation position, Ameritech's commitment to promptly resolve issues related to its OSS

 $[\]frac{24}{}$ (...continued)

examiner's of March 6, 1997 — is at odds with the MPSC's comment in the Commission's CC Docket No. 97-1 (Feb. 5, 1997) that Ameritech Michigan had, as of that date, complied with the checklist. The MPSC was fully justified in concluding, based on the record before it, that Ameritech's OSS interfaces appeared to be operationally ready. Moreover, relevant developments since that time serve to confirm that the MPSC had it right.

As Mr. Rogers explains in his affidavit, many of the issues identified by AT&T and the other carriers were not service-affecting, and several either were attributable to internal problems on the carrier's side of the interface, reflected poor miscommunications between the parties or were not really problems at all. Rogers Aff., ¶ 18.

interfaces and processes as they arise. This, of course, is the more relevant inquiry, given the relative insignificance of the issues raised by those carriers. Ameritech has demonstrated its commitment to resolving OSS-related problems through concrete, tangible actions. Among other things, Ameritech has devoted significant resources and personnel and has put in place procedures, including the maintenance of detailed trouble logs, to ensure that any OSS-related problems are promptly addressed and fixed as soon as they are identified. Rogers Aff., ¶¶ 18, 30, 72-80, 87, 99-101 & Sch. 14. In addition, Ameritech escalated its efforts beginning earlier this year to instruct and educate requesting carriers regarding the effective use of Ameritech's OSS interfaces and to address any operational or process-related issues associated with those carriers' use of the interfaces. These efforts have included not only Ameritech's development and publication of the user guides identified above, but also the hiring of additional employees specifically assigned to assist requesting carriers with regard to OSS-related and other operational issues. Mickens Aff., ¶¶ 12-13.

In the context of Ameritech's OSS interfaces, then, operational readiness is properly defined as whether those interfaces have undergone sufficient testing or use to provide reasonable assurance that requesting carriers can obtain timely access to the OSS functions needed to enter the marketplace and successfully service end users at anticipated demand levels. Ameritech's OSS interfaces clearly meet this standard. Rogers Aff., ¶¶ 6, 7, 15-124 & Schedules 1, 15. Indeed, none of the problems identified by AT&T or other carriers reflect major defects in Ameritech's OSS interfaces, nor do they prevent those carriers from successfully accessing the OSS functions they employ to service end users. And, to the extent that the problems identified relate to "bugs" in the systems or processes for which Ameritech is responsible, Ameritech has fixed those "bugs" and put in place the necessary procedures and resources to avoid their recurrence.

With respect to capacity, Ameritech's interfaces are not only ready to receive (and in many cases are already processing) data, they have sufficient capacity now to meet the current demand forecast (based on, among other things, carrier forecasts) through the fourth quarter of 1997. Meixner Aff., ¶¶ 23-46. Ameritech has implemented sound capacity planning procedures to ensure that its systems will continue to meet or exceed future potential demand growth. Ameritech reviews forecasts of expected demand against tests of electronic and manual capacity on an ongoing basis, and adjusts its system resources as necessary to stay six months ahead of forecasted potential demand. Rogers Aff., ¶¶ 7, 106-108, 116; Mickens Aff., ¶ 73.

Outside systems experts have reviewed extensive tests of Ameritech's capacity and have confirmed that Ameritech's interfaces have sufficient capacity to meet currently forecasted demand. Meixner Aff., ¶¶ 23-46. These capacity tests were conducted for each interface and incorporated the recommendations of the outside systems experts, as well as Ameritech's own experience in capacity analysis. In each case, the basic procedure was to develop test transactions that make up a representative sample of the different kinds of transactions that are expected to be received from requesting carriers, in the proportion that those transactions are expected to occur. Ameritech personnel then ran those test transactions on the appropriate electronic systems. The volume of test transactions processed, and the time in which they were processed, were used to calculate the applicable interface's capacity, based on the expected hours of operation for the interface (in most cases, Ameritech's business hours). That capacity was then compared to forecasts of expected demand. A team of outside systems experts reviewed the test procedures and results to confirm that they were conducted properly.

The results of these tests demonstrate that each OSS interface has more than enough capacity to meet expected demand through the remainder of 1997. The following matrix summarizes the test results:

OSS Function	Tested Capacity	4th Qtr 1997 Forecast Maximum Demand	Surplus Capacity
Pre-Ordering (EDI) (per month) (Meixner Aff., ¶ 31; Schs. 9-10)	307,000	226,500	80,500
Ordering (per month)			
EDI (Meixner Aff., ¶ 37; Schs. 16-17)	368,800	239,000	129,800
ASR (Meixner Aff., ¶ 39; Schs. 18-19)	583,400	23,500	559,900
Provisioning (per month) (Rogers Aff., ¶¶ 111-114)			
Firm Order Confirmations (EDI)	368,800	239,000	129,800
Firm Order Confirmations (ASR)	583,400	23,500	559,900
Change in Status (EDI)	11,10026	7,200 ²⁶	3,900
Order Completion (EDI)	368,800	239,000	129,800
Repair and Maintenance (per month) (Meixner Aff., ¶ 42; Sch. 21)	49,200	48,000	1,200 ^{2<u>7</u>/}
Billing (per day) (Meixner Aff., ¶ 46; Sch. 23)	28,993,000	18,000,000	10,993,000

<u>Performance Measurements and Reports</u>. The AT&T, Sprint, Brooks Fiber, MFS, and TCG Agreements contain specific performance benchmarks and standards that ensure that all checklist items are available to competing carriers on a nondiscriminatory basis and at parity with what Ameritech provides to its end users, its affiliates and any other competing carrier.

Estimated as 3 percent of the related amounts for firm order confirmations. See Rogers Aff., ¶ 113.

Ameritech is currently in the process of purchasing and installing additional capacity in this area. See Rogers Aff., ¶ 110.

The Mickens affidavit describes in detail these benchmarks and standards. Mickens Aff., ¶ 17-28.

With respect to interconnection, Ameritech has agreed to measure and report, on a monthly basis, interconnection performance in accordance with standards and benchmarks specified in the AT&T and Sprint Agreements, which have been approved by the MPSC. 28/
These standards and benchmarks measure the quality of interconnection service Ameritech provides to requesting carriers for, inter alia, trunk provisioning, trunk blocking and time to restore trunks to service. In order to ensure compliance with these standards, Ameritech maintains detailed records with respect to each of these parameters and makes these records available to requesting carriers. In addition, Ameritech issues monthly interconnection reports in an easy-to-understand format that permit the carrier to compare Ameritech's performance for that carrier with the specified benchmarks and with the performance that Ameritech provides to other carriers and to itself. Ameritech also has agreed to work with AT&T and Sprint to refine these benchmarks, and to add new ones to the extent warranted by additional experience in provisioning interconnection trunks and collocation to requesting carriers. Mickens Aff., ¶ 22, 30, 47-49 and Sch. 17.29/

With respect to unbundled network elements, Ameritech's interconnection agreements impose specific performance standards and benchmarks. These standards and benchmarks, which are the results of negotiations and arbitrations, include provisioning intervals for unbundled loops and unbundled transport. Ameritech measures and reports its performance against these benchmarks on a monthly basis for each requesting carrier, in a format similar to

^{28/} See AT&T Agreement, § 3.8, Sch. 3.8; Sprint Agreement, § 3.8, Sch. 3.8.

^{29/} AT&T Agreement, § 3.8.2, Sch. 3.8; Sprint Agreement, § 3.8.2, Sch. 3.8.

that used for its resale and interconnection performance reports. In addition, Ameritech also measures and reports on a monthly basis the performance of its OSS interfaces in terms of cycle times, reliability (accuracy) and availability. Mickens Aff., Schedules 25-27. Ameritech further maintains detailed records, available for review by competing carriers and regulators, which reflect Ameritech's performance with respect to these standards and benchmarks. Mickens Aff., ¶ 23-27, 31, 50-69 and Schedules 18-21. Ameritech also has agreed to work with AT&T and Sprint to refine these standards and benchmarks and to add new ones as (and to the extent) warranted by additional experience in provisioning and serving customers of unbundled network elements. Mickens Aff., 11/2014

With respect to access to poles, ducts, conduits and rights-of-way (collectively, "structure"), Ameritech has established a Structure Access Coordinator to serve as the single point of contact for all access to structure by anyone, including Ameritech itself. The Coordinator provisions and monitors access on a first come, first served basis. Mayer Aff., ¶ 118-119. No carrier, including Ameritech or its affiliates, receives any preference in the allocation of space. Time frames for the steps in provisioning access to structure are included in Ameritech's Structure Access Guidelines. See Mayer Aff., ¶ 121. Records reflecting the operations of the Coordinator are generally available to competing carriers and regulators to ensure that the nondiscrimination and parity mandates of the Act are fulfilled. See Mayer Aff., ¶ 154-155.

^{30/} AT&T Agreement, § 9.10, Sch. 9.10; Sprint Agreement, § 9.10, Sch. 9.10.

AT&T Agreement, § 9.10.2; Sprint Agreement, § 9.10.2.

AT&T Agreement, § 16.22; Sprint Agreement, § 16.22.

^{33/} AT&T Agreement, §§ 16.8, 16.19; Sprint Agreement, §§ 16.8, 16.19.

With respect to resale, Ameritech has agreed to (a) measure in a clearly defined manner the quality and timeliness of services it provides to resellers using the same criteria that it uses to measure the comparable services it provides to its own retail customers, and (b) generate monthly reports for each competing carrier that (i) numerically and graphically show these measurements (and the underlying data) for the carrier and (ii) compare those measurements to the same measurements for services provided to Ameritech's retail customers, and for services provided to Ameritech's affiliates and other competing carriers. Mickens Aff., ¶ 28, 32, 70 and Schedules 22-24, 33. For example, Ameritech measures for POTS services the percentage of lines installed in greater than 6 days, the percentage of lines not installed by the due date, the percentage of new service failures, the percentage of lines out of service for more than 24 hours, the mean time to repair lines, the percentage of initial trouble reports and the time it takes Ameritech to supply Firm Order Confirmations ("FOCs") to requesting carriers. Mickens Aff., ¶ 28.

Ameritech began issuing performance reports to requesting carriers and the MPSC on a monthly basis in February of this year. The reports issued to date reflect Ameritech's performance results for interconnection, unbundled network elements and resale on a monthly basis from January through April 1997. These reports show that on an overall basis, Brooks Fiber and other requesting carriers are being provided services on a nondiscriminatory and reliable basis and at quality levels that meet the applicable contract performance benchmarks and are on par with that which Ameritech provides to itself. Mickens Aff., ¶¶ 47-70, 122. In

See AT&T Agreement, § 10.9, Sch. 10.9.2; Sprint Agreement, § 10.9, Sch. 10.9.2.

addition, although the month-to-month results for certain performance measures reflect some volatility (attributable to relatively modest volumes being measured, monthly aberrations or other factors beyond Ameritech's control), the trends of these results over time show that the overall timeliness, reliability and quality of services provided to requesting carriers has steadily increased. <u>Id</u>.

The Brooks Fiber, MFS, TCG, AT&T and Sprint Agreements provide for penalties and credits, and acknowledge the availability of regulatory complaint procedures (before the MPSC, the Commission, or both), in the event that Ameritech fails to live up to its quality and parity commitments. ³⁵ The reporting and recordkeeping requirements ensure that both competing carriers and regulators will be able to determine on an ongoing basis whether and to what extent these requirements are being satisfied. Mickens Aff., ¶ 29. As noted above, the Mickens affidavit also describes and contains specific data on Ameritech's recent actual performance levels for Brooks Fiber and other carriers. Mickens Aff., ¶ 47-70 and Schedules 17-27, 33.

Prices. All of the rates and discounts contained in the AT&T and Sprint Agreements are available to Brooks Fiber, MFS and TCG through the MFN clauses in their agreements, and these rates and discounts comply fully with the Section 252(d) pricing standards. All of the AT&T rates and discounts, and most of the Sprint rates and discounts, are the product of

See, e.g., AT&T Agreement, §§ 3.8.5, 9.10.5, Sch. 10.9.6; Sprint Agreement, §§ 3.8.5, 9.10.5, Sch. 10.9.6.

arbitration. 36/ The MPSC has found that these arbitrated rates and discounts comply with Section 252(d)'s pricing standards. 37/

B. Ameritech is Providing Each Item of the Competitive Checklist at Rates and on Terms and Conditions That Fully Satisfy the Act.

The affidavits of Edwards, Palmer, Mayer, Rogers, Kocher, Meixner and Mickens describe the products and services, prices, provisioning, operational systems, and performance benchmarks and reporting that Ameritech is providing to fully implement each item of the competitive checklist. Attached to the Edwards affidavit are schedules that demonstrate how Ameritech's interconnection agreements satisfy the requirements of the Act and the Commission's regulations and reflect the amount of each checklist item being furnished to competing carriers. Edwards Aff., Schedules 1 & 2. The table below summarizes the current use of checklist items by competitors in Michigan.

The Sprint Agreement also contains prices for certain elements and products not priced in the AT&T Agreement. These prices are all based on a conservative estimate of forward-looking economic costs calculated in a manner consistent with the Commission's pricing rules, and they are identical to those proposed by Ameritech Michigan in the MPSC's "permanent cost" docket (MPSC Case No. U-11280). See Palmer Aff., ¶ 18; Broadhurst Aff., ¶ 4-18, 38-40. See also Ameritech Michigan's Submission of Additional Information, Case No. U-11104, pp. 9-10 (Mich. Pub. Serv. Comm'n dated March 27, 1997) ("Ameritech MPSC Additional Submission").

With respect to unbundled network elements, interconnection, local transport and termination, and collocation, the arbitrated rates are, in fact, lower than a conservative estimate of forward-looking economic costs determined in accordance with the Commission's now-stayed pricing rules. Similarly, the arbitrated wholesale discount — a single 22% discount applicable to all services — is substantially greater than the discount level (about 13%) determined by applying the methodology set out in 47 C.F.R. § 51.609. See Palmer Aff., ¶¶ 15-19; Broadhurst Aff., ¶¶ 4-18, 38-40.

CHECKLIST ITEM	FURNISHED TO	TOTAL
Interconnection	Brooks, MFS, TCG, MCI	14,454 end office interconnection trunks (4/30/97)
		Virtual collocation in 37 wire centers (4/30/97)
Unbundled Elements		
- NIDs	Brooks, MFS	22,510 (one NID per unbundled loop) (4/30/97)
- OSS	Brooks, MFS, TCG	Electronic interfaces are available and being used by competitors to obtain UNEs (approximately 8,500 loop orders received via ASR regionwide and approximately 5,000 in Michigan) and resale (approximately 19,600 orders received via EDI regionwide and approximately 6,000 in Michigan)
Poles, ducts, conduits, and rights-of-way	Brooks, AT&T, MCI, Climax and others	99 poles (12/31/96)
		71,684 duct and conduit feet (12/31/96)
Local Loops	Brooks, MFS, MCI	22,510 (4/30/97)
Local Transport	Brooks, MFS, TCG	Furnished with other items under access tariff
Local Switching	No orders received	No orders received
911	Brooks, MFS, TCG, MCI	29 trunks (4/30/97)
Directory Assistance	Brooks, MFS, MCI	86 trunks (4/30/97)
Operator Call Completion	Brooks	XX trunks (4/30/97)
White Pages Listings	Brooks, MFS, MCI, TCG, USN, AT&T and others	3,328 business listings (3/31/97) 7,328 residential listings (3/31/97)
Number Administration	Brooks, MFS, TCG, MCI, Phone MI	150 NXXs assigned (4/15/97)
Signaling and Call-Related Databases	Brooks, MFS, TCG	29M queries to LIDB and 800 in 1996 (regionwide total)
Interim Number Portability	Brooks, MFS, MCI	24,354 numbers ported (4/30/97)
Local Dialing Parity	Brooks, MFS, TCG	Available in 100% of end offices in Michigan
Reciprocal Compensation	Brooks, MFS, TCG, MCI	63.2 million minutes in Jan. 1997
Resale	MFS, AT&T, USN, MCI, Coast-to-Coast and others	8,279 non-Centrex lines (4/30/97)

The following summary provides an overview of Ameritech's implementation of each item through its agreements with Brooks Fiber, MFS, TCG, AT&T and Sprint. (The headings ((i), (ii), etc.) below correspond to the headings that appear in Section 271(c)(2)(B).)

(i) Interconnection.

Ameritech's interconnection agreements comply with the requirements of Section 271(c)(2) and the Commission's regulations regarding methods and quality of interconnection. See Edwards Aff., ¶¶ 18-40, Sch. 1. Ameritech currently is furnishing Brooks Fiber, MFS and TCG with interconnection at local and tandem switches, as well as virtual collocation in a number of wire centers, pursuant to their approved agreements. Ld., ¶¶ 22-23, Sch. 2 at 1. These carriers also can obtain interconnection at any technically feasible point on Ameritech's network, including the line side of the local switch, central office cross-connect points, out-of-band signaling transfer points necessary to exchange traffic and access call-related databases, and all technically feasible points for access to unbundled network elements, as well as physical and virtual collocation and meet-point arrangements, all on terms and conditions and at rates established in the AT&T and Sprint Agreements. Ameritech provides interconnection to competing carriers using the same or equivalent facilities, technical criteria and service standards that Ameritech applies to itself for comparable services. Id., ¶ 38.

The Mayer affidavit describes how the various types of interconnection are ordered and provisioned (¶¶ 16-27, 74). The ordering procedures for collocation are similar to those used for access service. <u>Id.</u>, ¶¶ 57-73. The process begins when a competitor submits an industry-standard Access Service Request ("ASR") to the Ameritech Information Industry Services, Inc. ("AIIS") Service Center in Milwaukee. The ASR is then processed by the

See Brooks Fiber Agreement, §§ 4.0-6.0, 12.0; MFS Agreement, §§ 4.0-6.0, 12.0; TCG Agreement, §§ 4.0-6.0, 12.0. Ameritech is also furnishing interconnection and virtual collocation to MCI. Edwards Aff., Sch. 2 at 1. See also Ameritech MPSC Additional Submission, pp. 13-15.

AT&T Agreement, Articles IV-VI, XII, Pricing Sch., Item VII; Sprint Agreement, Articles IV-XII, Pricing Sch., Item VII.